
CDF Operations Report

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All Experimenters Meeting
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Store Summary (July 29- Aug 6)

Store	Start Date	Hours	Init. Lum	Deliv. Lum (pb ⁻¹)	Live Lum (pb ⁻¹)	Good (pb ⁻¹)	Good w/SVX (pb ⁻¹)	Comments
5588	7/29 Sun	35.0	261.9	8.57	6.66 77.8%	6.66 77.8%	6.46 75.4%	DAQ problems at startup; Shower Max LV; L2 upgrade tests
5589	7/31 Tue	43.8	268.0	11.12	8.77 78.9%	8.39 75.5%	3.11 27.9%	BLM HV problem; Solenoid trip; L2 upgrade tests
5590	8/02 Thu	41.7	289.0	10.95	8.01 73.2%	7.39 67.5%	7.39 67.5%	L2 problems at startup (bad cable); unresponsive COT crate; lot's of L2 upgrade tests.
5592	8/04 Sat	7.9	218.9	3.56	2.25 63.2%	2.25 63.2%	2.25 63.2%	L2 problems (decision PC got stuck); L2 upgrade tests
Total		128.4		34.19	25.69 75.1%	24.69 72.2%	19.20 56.2%	

- Lot's of L2 upgrade tests during this last week before shutdown
- Need to run tests at high lumi
- Efficiency is lower than average

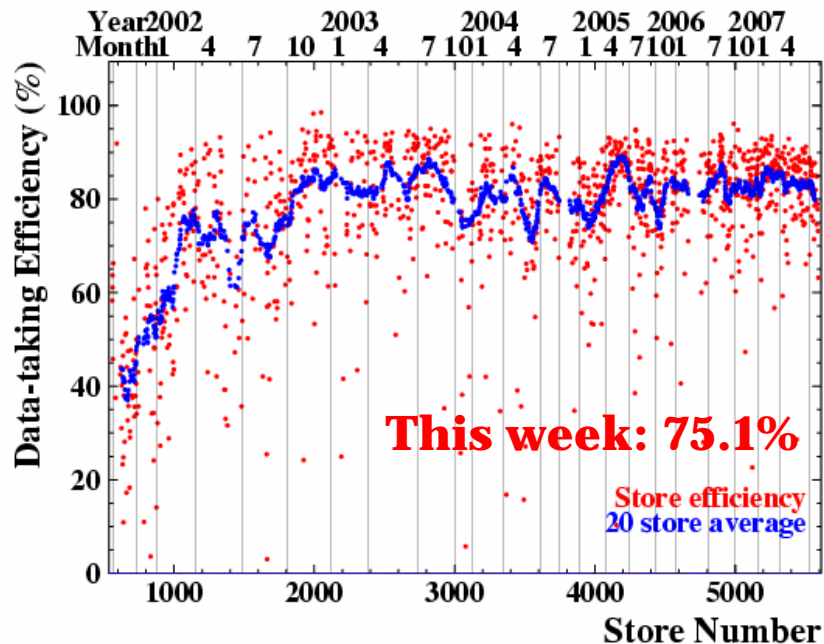
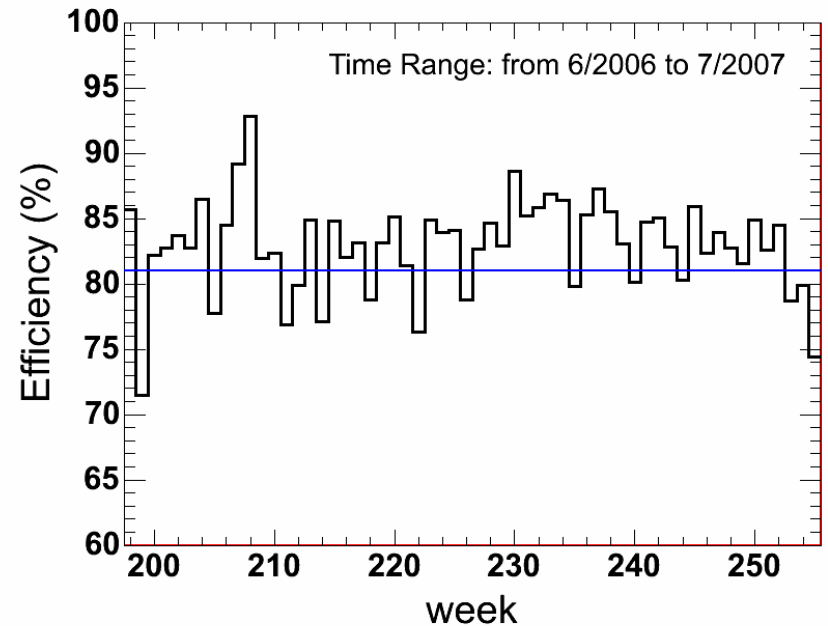
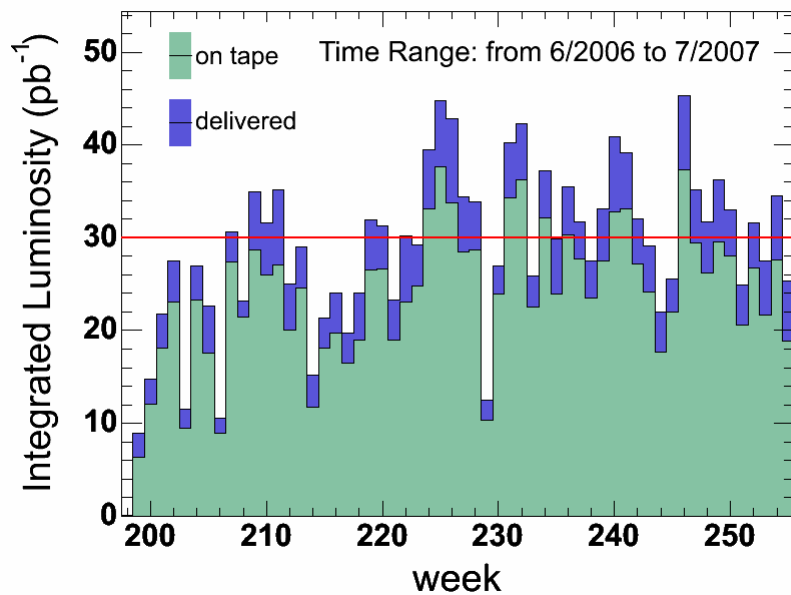
CDF Operations

- **Down time this week**
 - DAQ problems due to stuck error logger
 - CES LV monitoring
 - BLM HV monitoring
 - Unresponsive COT crate
 - High dead time at L2 due to bad cable
 - L2 decision PC got stuck
- **Work done this week**
 - Lot's of L2 upgrade tests (next slide)
 - Silicon calibration
 - Plug Calorimeter calibration
 - “Wall” Hadron Calorimeter calibration
 - Tested consumers and SVT with SL4
- **We got everything done from what needed to be tested before shutdown**

L2 upgrade work

- **Completed validation of L2 Calorimeter Trigger Upgrade**
 - Uses full trigger energy granularity to greatly improve MET resolution
 - Replace neighbor-expansion ("Pacman") clustering with cone algorithm (similar to offline)
 - Will allow advanced tau algorithms, etc.
- **Tested trigger table using only L2 upgrade for use after shutdown**
 - old L2 Cal system decommissioned during shutdown
- **Tested faster path to send 2D tracks to L2 PC**
- **Tested COT Stereo in Level 2**
 - Established data flow configuration to decision PC
 - Tested performance at start of hot store
 - Tested algorithms to point 3D tracks to muon chambers
 - Factor 2-3 rate reduction at peak luminosities for CMX
- **Expect both tracking improvements to be validated soon after beam returns**
 - Some firmware and software changes during shutdown based on results of recent tests

Store summary...



- **$\sim 2,658.4 \text{ pb}^{-1}$ on tape**
- **Added $\sim 25.7 \text{ pb}^{-1}$ this week**
- **From 6/07 to 8/08**
 - **Delivered lumi: 1.671 fb^{-1}**
 - **Live lumi: 1.386 fb^{-1} (82.9%)**